

ENVS 12: Introduction to Environmental Science

Section 3994, Fall 2013, Mondays 6:30-9:30 p.m.

1. Instructor Contact Information:

Martha Murphy

Office: Earth & Space Sciences Offices

Office Hours: Mon. 5:30-6:30 p.m.

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(note the numeral 3 after Murphy!)

Feel free to contact me in person, by phone, or by email, but email is best if I am not on campus. I prefer to meet during office hours. If that is not possible, please contact me to set up an alternate time. I check email during the day M-Th and attempt to respond promptly (within 24 hours). I may check my email Fri-Sun and in the evenings, but I may not.

2. **Course Description:** ENVS 12 is an introduction to environmental issues from a scientific perspective, focusing on physical, chemical, and biological processes within the Earth system, the interaction between humans and these processes, and the role of science in finding sustainable solutions. Topics include contemporary environmental issues related to resource use, pollution, and human population growth. ENVS 12 fulfills the natural science general education (GE) requirement for graduation and the physical science GE requirement for transfer to the CSU and UC systems. It is also a core class for the Environmental Studies major. See your academic advisor for more details.

3. **Course Student Learning Outcomes:** Upon successful completion of the course the student will be able to:

- Identify and describe major global, regional, and local environmental issues.
- Analyze the scientific basis of major environmental issues and identify and evaluate potential solutions.
- Show relationships between human actions and environmental issues and examine the impacts of environmental issues on human populations.
- Use scientific methodologies, including the construction and utilization of scientific models.
- Correctly use information sources related to environmental issues.

4. Course Materials

- A. Required Text and online access: *Essential Environment: The Science Behind the Stories*. 4th ed. Withgott & Laposata (2012), with *Mastering Environmental Science* online access. Pearson. You will need to use the access code to log onto the "Mastering" site where our class schedule, gradebook, and assignments will be. It also contains many valuable tools including flashcards, practice questions, current events readings, and other study tools.
- B. Recommended Material: A notebook/folder (or 3-ring binder) dedicated to ENVS 12 and a simple calculator, and used paper on which to print your papers. (We'll go over this in class.)
- C. Additional Readings and Supplementary Material: Additional readings or other materials will be assigned, including (but not limited to) handouts, newspaper or magazine articles, websites, computer programs, and videos/DVDs. You may need to access these items at the library and/or on the internet.

5. Course Requirements and Evaluation:

Grading System: You will be evaluated by exams, homework assignments, and participation during the semester. There are 330 points possible in this class. Points are distributed as follows:

<u>Component</u>	<u>Points</u>	<u>% of Course Grade (approximate)</u>
In Class Participation	20	6%
Assignments& Quizzes	175	53%
Exams	135	41%
TOTAL	330	100%

In-Class Activities: The in-class activities portion of your grade will be based on class attendance, participation in class discussion, and satisfactory completion of in-class activities. You are expected to:

- Be on time and prepared for class and remain in class for the entire period.
- Have a positive attitude and not be disruptive. Notably, please turn off all electronic devices (e.g. IPODs, cell phones) prior to the start of class. Laptops may be used only for taking notes. No texting!
- Be engaged in classroom discussions and activities and be willing to add your input.
- Work collaboratively when I assign group activities. We will do many group activities.
- All students will present the results of their research papers in a short presentation at the end of the semester. The presentations will take place during our final exam time. These presentations are a **required** part of the research project and you must attend this session, present your project, and review other student presentations. If you miss this session you will not receive credit for any of the research project.
- Your In-Class Participation points will be awarded based on your level of participation in the in-class activities, not on any specific grading rubric (since in-class activities vary so much). Students who attend class and participate fully will most likely be awarded all of these points.

Participation in development of Learning Module: This semester I will be pilot-testing a learning module that I am co-authoring with two other faculty members from 4-year colleges in other states. The module is a sustainable agriculture/climate change/geoscience thinking module and will eventually be available online to teachers around the country. These learning modules are a tremendous resource to faculty (we may use some this semester) and our piloting them really helps the authors learn how well they function. The module should in no way take away from what we would normally cover but, in fact, will add something. We will be asking you if we can collect data from you that will in NO WAY be connected to your name and you DO NOT have to give consent, although since it is truly anonymous we really appreciate it if you are willing to give us that permission. Participating in the actual classroom and homework portion of the module, however, is not optional and is a required part of our class. If you have any questions or concerns about this please see me right away.

Assignments:

- A preliminary list of the assignments is shown below. *This list is subject to change, although total points will not.*
- Assignments are due at the beginning of class on the date due for you to be awarded the full amount of credit for your work. (You will not necessarily earn all of the points for each assignment!) Assignments handed in within one week of the due date will be awarded half of the credit you would have earned handing in the assignment on time. Assignments handed in more than one week late earn you no credit but do give you the right to earn extra credit if all other assignments are handed in. **Unless previously arranged for, printed assignments (as opposed to online assignments) are NOT accepted through email; however, if you have completed an assignment on time but have an emergency that keeps you from turning it in before class, I will likely accept it if you email it to me before class time (with proof of your emergency) and then follow up with a hard copy.** I encourage the use of recycled or previously used (one-sided) paper for your assignments, as well as the use of narrow margins.
- You will be asked to submit some assignments using the Turnitin system. Turnitin not only checks for plagiarism, it has other useful editorial features. Assignments that are found to be plagiarized will receive zero

points. To use Turnitin, you need to sign up (it's free to you). I will provide you with sign up information when we get closer to using Turnitin.

- Guidelines for each assignment (and due dates) will be handed out and/or posted on the class website. Point values for each assignment listed below are approximate; actual point values will be stated on each assignment:

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|----------------------------------|--|
| 1. Ecological Footprint – 10 pts | 4. Other Homework and quizzes – 75 pts |
| 2. Field Trip Report 1 – 15 pts | 5. Environmental Awareness Exercise – 10 pts |
| 3. Field Trip Report 2 – 15 pts | 6. Research Project/Presentation – 50 pts |

Field Trips:

- One goal of this course is to connect you with environmental issues in your community. To help facilitate this, I have arranged 3-5 local fieldtrips directly related to the subject matter covered in class.

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- The field trips are an integral component of the course and are considered class meetings at alternative sites. All student conduct standards apply.
- Each student will choose two field trips to attend outside of class time. These field trips will require written reports (see above). There may also be fieldtrips during established lecture hours that are not eligible for write-up credit. Unless otherwise noted, students are responsible for their own transportation to the site.
- If you are unable to fit the scheduled fieldtrips into your schedule, please see me to arrange an alternative fieldtrips. Alternative arrangements **must** be approved by me.
- I may offer extra credit for students who attend & write-up more than two field trips.
- Past students often cite the field trips as one of their favorite components of the course!

Exams:

We will have three exams. The exams are difficult. You need to study your notes throughout the semester, and you may want to form a study group. Cramming the week of an exam is generally not effective. Exams may contain true/false, multiple choice, short-answer, and/or essay questions. Important notes on exams:

- You must provide your own #2 pencil, some blank paper, and a 100 question Scantron form for all exams.
- Leaving the room during an exam is NOT recommended. If you do so, you must turn your exam in to me, and consider yourself done.
- You will not be allowed to start an exam once another student has finished and left the room.
- Cheating is not tolerated, and will result in no credit for the exam.
- Exams cover material from the lecture, the text, and our in-class activities. It is expected that you will read the relevant chapters before we discuss them in class. Ideally the lecture is meant to compliment but not purely repeat the text. Outside materials and readings will be included and posted on the course website. There is material in the text that we do not cover in class that you are still responsible for. If it's on the study guide and it's in the text, you are responsible for it. It is expected that you will spend several hours each week outside of class time reading the text, and reviewing and rewriting your class notes.

Extra Credit:

Extra Credit opportunities may be available throughout the semester at my discretion. All opportunities will be made available to the entire class, but you have to have handed in all assignments to be eligible for extra credit. Other specific requirements will be outlined in advance.

Suggestions for Success:

- Read the assigned reading and take notes as you read.
- Take notes in class and review your lecture notes within 24 hours.
- Write out answers to all the study guide questions, preferably within 24 hours of covering the material.

- Get phone and email info from at least 2 other students in our class, in case you miss class and need lecture notes. I will not provide you with lecture notes.
- Form a study group with other active learners. Challenge each other to explain important concepts.
- Get your field trips completed and written up early in the semester.
- Abide by the Code of Student Conduct while in class and on campus, including rules on cheating and plagiarism. You are encouraged to read the code in its entirety if you have any questions. **Any violation of this code can result in your suspension from the classroom and/or receiving no credit for the assignment or exam.** The code (and other guidelines concerning student behavior on campus) can be found at the following web address:

http://www.santarosa.edu/for_students/rules-regulations/student-conduct.shtml

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Course Grades: Your final course grade will be based on the following rubric. I reserve the right to lower the grade cutoffs; however, they will not be raised.

297 – 330	A	excellent
264 – 296	B	good
231 – 263	C	satisfactory
198 – 230	D	passing, less than satisfactory
Below 198	F	fail

6. Attendance Policy and Policy on Late Work

Class attendance and participation are critical components of the learning process. We will spend quite a bit of time working collaboratively in class; therefore, a lot of the material is covered only in class (not in the text). Further, your peers rely on your input during class discussions/activities. Being disruptive in class also affects your peers. You will be asked to leave if I believe you are being disruptive.

Per the SRJC attendance policy (<http://www.santarosa.edu/polman/8stuserv/8.1.5P.pdf>), a student may be dropped due to excessive absence. **In this class, you may be dropped if you exceed 6 hours of absence.** In addition, students who miss the first class will be dropped from the roster or waiting list. However, you should not rely on me to drop you if you stop attending. It is your responsibility to officially drop the class.

Absences: SRJC places a high value on attendance. In the classes I teach absences can affect your grade in several ways. Indirectly, your participation grade is affected simply by your inability to participate in a class that you do not attend. Missing class also causes you to miss important lecture and discussion material that may be useful in future class meetings and other course work. This latter effect can be mitigated to a degree by obtaining class notes from a classmate in attendance. Also, arriving late disrupts the learning environment and will count as an absence.

Excused versus unexcused absences: In some instances it may be possible to have an absence(s) excused. The criteria for an excused absence are that your failure to attend class must be due to extraordinary circumstances beyond your control. In order for an absence to be excused you must provide relevant reliable documentation. Requests for planned absences to participate in intercollegiate competition of whatever sort require documentation from a coach and or advisor, are subject to the requirements above and are not automatically granted. Competition in these events is a privilege. Please contact me before class (email is best) about ANY absence. Examples of unexcused absences would be getting called in to work (by signing up for this class you have agreed to set aside every Monday evening to attend), routine medical/dental visits, and vacations.

Any request made for an excused absence on the day of the final must meet the highest bar. Finally, I reserve the right to deny any request for an excused absence. All excused absences are given solely at my discretion.

You are responsible for all the material and assignments you miss due to any absence. Notably, much of the in-class material cannot be made up. Please contact me if you have attendance concerns.

Exams may generally not be taken after the exam date. If you give at least one week prior notification of your exam date absence, I *may* opt to reschedule your exam. The rescheduled exam date will likely be prior to your scheduled absence. I understand that on *very rare occasions*, absences are unscheduled and unavoidable. If you miss an exam due to illness or family emergency, you must call or email me on the day of the exam and leave a message, and you may be required to show proof of the emergency (e.g. tow truck receipt, doctor's note). If deemed appropriate by me, a make-up exam will be scheduled ASAP.

7. Academic Integrity

SRJC holds both faculty and students to certain standards of academic integrity. Academic dishonesty of any kind will not be tolerated. Academic dishonesty is regarded as any act of deception, benign or malicious in nature, in the completion of any academic exercise. Examples of academic dishonesty include cheating, plagiarism, collusion, and other academic misconduct. Please see the SRJC academic integrity procedures at:

<http://www.santarosa.edu/polman/3acadpro/3.11P.pdf>

8. Miscellaneous Items

You will be required to obtain access to the course website for your section. You will need to purchase an access code along with your textbook and I will give you a class code with which to check in to the class website. The most up-to-date schedule will be located on the website. Study guides for each chapter will be also posted on the course website after we have covered the material.

9. Accommodations: If you need disability related accommodations for this class, such as a note taker, test taking services, special furniture, use of service animal, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to me as soon as possible. You may also speak with me privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. They are located at Bertolini Student Center, Room 4842 (Third Floor).

10. A few important dates: (See the SRJC academic schedule or your academic advisor for details. Remember, you are responsible for dropping or withdrawing yourself)

September 8 Last day to drop a class without "W" symbol

November 17 Last day to drop a class with "W" symbol

11. In case of an emergency:

- Stay calm and follow all instructions I give you.
- If evacuation is necessary, I will lead you to the designated evacuation area. Stay with the class. After evacuation, I will take roll again to ensure that all students are safe.
- If you may need assistance during an evacuation, please see me ASAP to discuss an evacuation plan.
- Students are encouraged to program **SRJC Campus Police: 527-1000** into their cell phones. This is the number to call for all campus emergencies. From any campus landline, dial 1000. On campus, the response will be more rapid than calling 911.

Environmental Science 12
Tentative Schedule for Section 3994
Mondays 6:30-9:30 p.m. in Lark Hall Rm. 2042

Week	Date	Major Topics	Required Readings (4thEdition)
1	8/19	Introduction to Environmental Science and Sustainability	Chapter 1; Online Check-In
2	8/26	Introduction to Environmental Science and Sustainability Environmental History, Laws, Economics, and Ethics	Ch 2, "Vanishing Oysters", pp. 21 & top of 22 & 34-35 Chapter 5
3	9/2	No School : Labor Day	
4	9/9	Matter, Energy & Ecosystems	Chapter 2
5	9/16	Evolution, Biodiversity, and Population Ecology	Chapter 3
6	9/23	Species Interaction and Community Ecology	Chapter 4
7	9/30	Exam 1: Ch 1-5 and related material Human Population	Chapter 6
8	10/7	Food Resources & Sustainability	Learning Module
9	10/14	Food Resources & Sustainability	Chapter 7
10	10/21	Water Resources & Pollution	Chapter 12
11	10/28	Water Resources & Pollution Atmosphere & Air	Chapter 13
12	11/4	Exam #2 – Chs 6, 7, 11, & 12 and related material Global Climate Change	Chapter 14
13	11/11	No School: Veterans Day Holiday	
14	11/18	Global Climate Change Non-Renewable Energy Sources	Chapter 15
15	11/25	Renewable Energy Alternatives	Chapter 16
16	12/2	Managing Our Waste	Chapter 17
17	12/9	Exam #3: Chs 14-17 and related material	
18	12/16	Final Exam Period – Student Presentations: Monday, December 16, 6:30-9:30 p.m.	

The above schedule is designed as a guideline only and is subject to change. The online schedule on our course website contains more due dates and is also more up-to-date. Textbook readings are listed but there may be more detail in the online schedule. There will be additional readings.